



PATENT

Case Docket No. TRIPEP.023AUS2

Date: August 28, 2003

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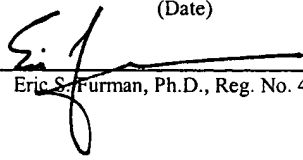
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s) : Matti Sallberg and Catharina Hultgren
Appl. No. : 09/929,955
Filed : August 15, 2001
For : VACCINES CONTAINING RIBAVIRIN AND METHODS OF USE THEREOF
Examiner : Bao Li
Group Art Unit : 1648

I hereby certify that this correspondence and all marked attachments are being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on

August 28, 2003

(Date)


Eric S. Furman, Ph.D., Reg. No. 45,664

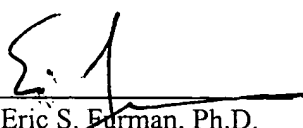
TRANSMITTAL LETTER

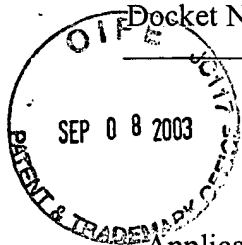
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Enclosed for filing in the above-identified application are:

- (X) An Information Disclosure Statement.
- (X) A PTO Form 1449 with fifty-one (51) references that are also enclosed.
- (X) A check in the amount of \$180.00 to cover the above fee is enclosed.
- (X) The Commissioner is hereby authorized to charge any additional fees, which may be required; or credit any overpayment, to Account No. 11-1410.
- (X) Return prepaid postcard.


Eric S. Furman, Ph.D.
Registration No. 45,664
Attorney of Record
Customer No. 20,995
(619) 235-8550



INFORMATION DISCLOSURE STATEMENT

Applicant : Matti Sallberg and Catharina Hultgren
App. No. : 09/929,955
Filed : August 15, 2001
For : VACCINES CONTAINING RIBAVIRIN
AND METHODS OF USE THEREOF
Examiner : Bao Li
Group Art Unit : 1648

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Enclosed is form PTO-1449 listing fifty-one (51) references that are also enclosed.

This Information Disclosure Statement is being filed under 37 C.F.R. § 1.97(c)(2) before the mailing date of a final action and before the mailing of a Notice of Allowance. This Statement is accompanied by the fees set forth in 37 C.F.R. § 1.17(p). The Commissioner is hereby authorized to charge any additional fees, which may be required, or to credit any overpayment to Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: August 28, 2003

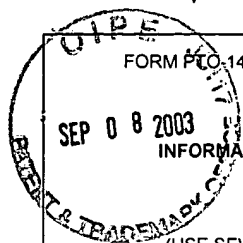
By: Eric S. Enzman

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FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEINFORMATION DISCLOSURE STATEMENT
BY APPLICANT

(USE SEVERAL SHEETS IF NECESSARY)

ATTY. DOCKET NO.
TRIEP.023AUS2APPLICATION NO.
09/929,955APPLICANT
Sallberg et al.FILING DATE
August 15, 2001GROUP
1648

SHEET 1 OF 3

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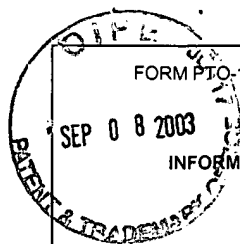
U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
	1.	4,950,647	08/21/90	Robins et al.			
	2.	5,350,671	09/27/94	Houghton et al.			
	3.	5,372,928	12/13/94	Miyamura et al.			
	4.	5,670,152	09/23/97	Weiner et al.			
	5.	5,670,153	09/23/97	Weiner et al.			
	6.	5,683,864	11/04/97	Houghton et al.			
	7.	5,712,145	01/27/98	Houghton et al.			
	8.	5,728,520	03/17/98	Weiner et al.			
	9.	5,756,312	03/26/98	Weiner et al.			
	10	5,767,097	06/16/98	Tam			
	11	5,856,437	01/05/99	Miyamura et al.			
	12	5,871,903	02/16/99	Miyamura et al.			
	13	5,942,234	08/24/99	Ralston et al.			
	14	5,989,905	11/23/99	Houghton et al.			
	15	6,060,068	05/09/00	Doyle et al.			
	16	6,063,772	05/16/00	Tam			
	17	6,071,693	06/06/00	Cha et al.			
	18	6,190,864	02/20/01	Cha et al.			
	19	6,194,140	02/27/01	Houghton et al.			
	20	6,214,583	04/10/01	Cha et al.			
	21	6,541,011	04/01/03	Punnonen et al.			
	22	6,555,114	04/29/03	Leroux-Roels et al.			
	23	2003/0044774	03/06/03	Valenzuela et al.			
	24	2003/0064360	04/03/03	Maertens et al.			

EXAMINER

DATE CONSIDERED

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FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
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APPLICANT
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SHEET 2 OF 8

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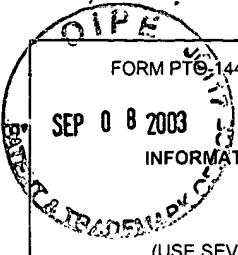
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FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	25	WO 96/28162	09/19/96	WIPO				
	26	WO 97/26883	07/31/97	WIPO				
	27	WO 98/16184	04/23/98	WIPO				
	28	WO 98/16186	04/23/98	WIPO				
	29	WO 98/30223	07/16/98	WIPO				
	30	WO 00/44388	08/03/00	WIPO				

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)	
	31	AASLD Abstracts 940, "Hepatitis C Virus NS5A Sequence Configuration does not Predict Response to Induction Interferon Plus Ribavirin," <i>Hepatology</i> , p. 394A (2000).
	32	Abregnani et al., "Perspectives for a vaccine against hepatitis C virus," <i>Journal of Hepatology</i> , 31: (suppl. 1):259-263 (1999).
	33	Bartenschlager et al., "Substrate Determinants for Cleavage in cis and in trans by the Hepatitis C Virus NS3 Proteinase," <i>Journal of Virology</i> , pp. 198 - 205, (1995).
	34	Chiang et al., "Enhancement of hepatitis C virus core antigen-specific type 1 T helper cell response by ribavirin correlates with the increased level of IL-2," <i>Vaccine Strategies Against Microbial Pathogens</i> , 42.11-42.16, p. A949 (date unknown).
	35	Cotonat et al., "Pilot Study of Combination Therapy with Ribavirin and Interferon Alfa for the Retreatment of Chronic Hepatitis B e Antibody-Positive Patients," <i>Hepatology</i> , 31(2):502-506 (2000).
	36	Encke et al., "Genetic Immunization Generates Cellular and Humoral Immune Responses Against the Nonstructural Proteins of the Hepatitis C Virus in a Murine Model", <i>Journal of Immunology</i> , 161:4917-4923 (1998).
	37	Fang et al., "Ribavirin enhancement of hepatitis C virus core antigen-specific type 1 T helper cell response correlates with the increased IL-12 level," <i>Journal of Hepatology</i> , 33(5):791-798 (2000).
	38	Grakoui et al., "A second hepatitis C virus-encoded proteinase," <i>Proc. Natl. Acad. Sci USA</i> , 90:10583-10587, (1993).
	39	Hsu et al., "Prospects for a Hepatitis C Virus Vaccine", <i>Clin Liver Dis</i> , 3(4):901-915 (1999).
	40	Kumar et al., "Sequence, expression and reconstitution of an HCV genome from a British isolate derived from a single blood donation," <i>Journal of Viral Hepatitis</i> , 7:459-465 (2000).
	41	Memar O. et al., "Antiviral Agents in Dermatology; Current Status and Future Prospects," <i>International Journal of Dermatology</i> , 34(9):597-606 (1995).
	42	Proust B. et al., "Two Successive Hepatitis C Virus Infections in an Intravenous Drug User," <i>Journal of Clinical Microbiology</i> , 38(8):3125-3127 (2000).
	43	Ramasamy et al., "Monocyclic L-Nucleosides with Type 1 Cytokine-Inducing Activity," <i>Journal of Medicinal Chemistry</i> , 43(5):1019-1028 (2000).
	44	Schulof R. S., "Clinical, Virologic, and Immunologic Effects of Combination Therapy with Ribavirin and Isoprinosine in HIV-Infected Homosexual Men," <i>Journal of Acquired Immune Deficiency Syndromes</i> , 3(5):485-492 (1990).

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 <p>FORM PT 6-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE</p> <p>SEP 08 2003</p> <p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</p> <p>(USE SEVERAL SHEETS IF NECESSARY)</p>	ATTY. DOCKET NO. TRIPEP.023AUS2	APPLICATION NO. 09/929,955
	APPLICANT Sallberg et al.	
	FILING DATE August 15, 2001	GROUP 1648

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
45	Spector et al., "The Antiviral Effect of Zidovudine and Ribavirin in Clinical Trials and the Use of p24 Antigen Levels as a Virologic Marker," <i>Journal of Infectious Diseases</i> , 159(5):822-828 (1989).
46	Tam et al., "Ribavirin Polarizes Human T Cell Responses Towards a Type 1 Cytokine Profile," <i>Journal of Hepatology</i> , 30(3):376-382 (1999) (ABSTRACT).
47	Tam et al., "The Immunomodulatory effects of ribavirin: Recent findings," <i>International Antiviral News</i> , 7/6:99 – 100 (1999).
48	Walsh et al., "Update on chronic viral hepatitis", <i>Postgrad Medical Journal</i> , 77(910):498-505 (2001).
49	Wang et al., "Synthesis and Cytokine Modulation Properties of Pyrrolo[2,3,-d]-4-pyrimidone Nucleosides," <i>J. Med. Chem.</i> , 43(13):2566-2574 (2000).
50	http://www.msi.com/life/products/cerius2/modules/analogbuilder.html , C2Analog Builder, July 6, 2000.
51	Zhang et al., "Interferon- α Treatment Induces Delayed CD4 Proliferative Responses to the Hepatitis C Virus Nonstructural Protein 3 Regardless of the Outcome of Therapy," <i>The Journal of Infectious Diseases</i> , 175:1294-1301 (1997).

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